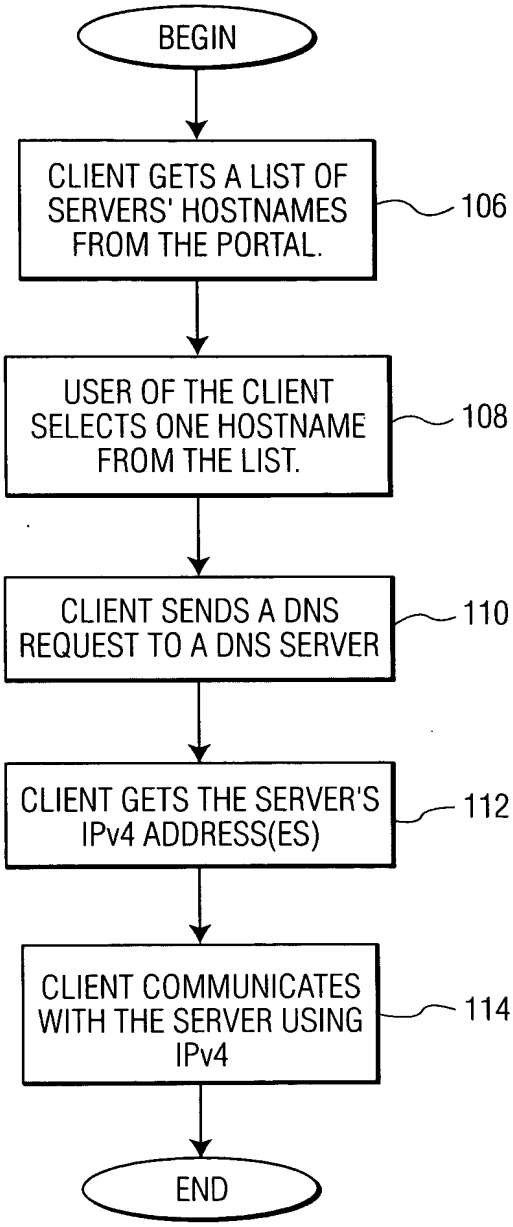
BEGIN
CLIENT GETS A LIST OF SERVERS' HOSTNAMES FROM THE PORTAL.
106
USER OF THE CLIENT SELECTS ONE HOSTNAME FROM THE LIST.
108
CLIENT SENDS A DNS REQUEST TO A DNS SERVER
110
CLIENT GETS THE SERVER'S IPv4 ADDRESS(ES)
112
CLIENT COMMUNICATES WITH THE SERVER USING IPv4
114
END

FIG. 1

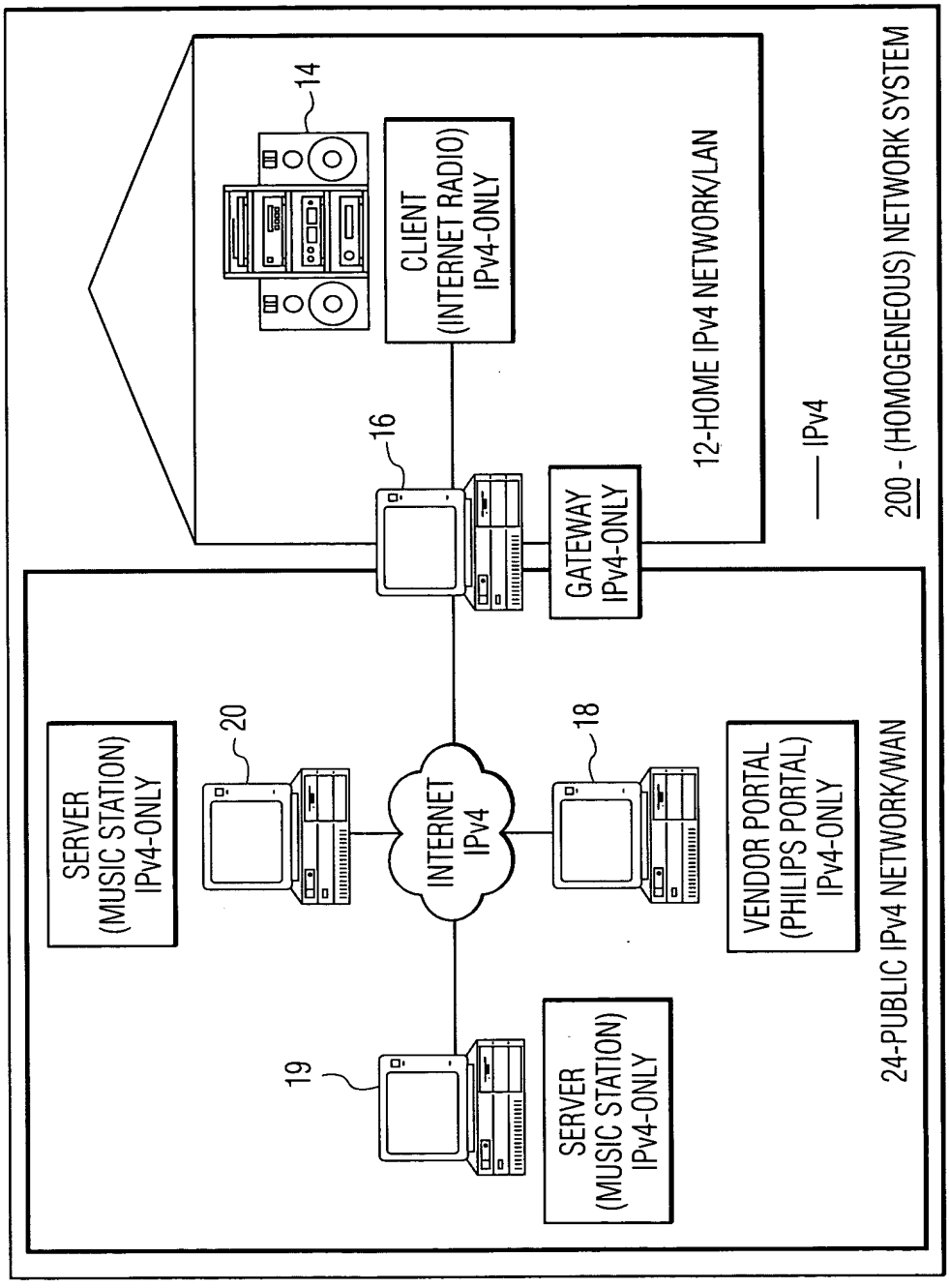
200 - (HOMOGENEOUS) NETWORK SYSTEM
24-PUBLIC IPv4 NETWORK/WAN
12-HOME IPv4 NETWORK/LAN
IPv4
14
CLIENT (INTERNET RADIO) IPv4-ONLY
16
GATEWAY IPv4-ONLY
SERVER (MUSIC STATION) IPv4-ONLY
20
INTERNET IPv4
18
VENDOR PORTAL (PHILIPS PORTAL) IPv4-ONLY
19
SERVER (MUSIC STATION) IPv4-ONLY

FIG. 2

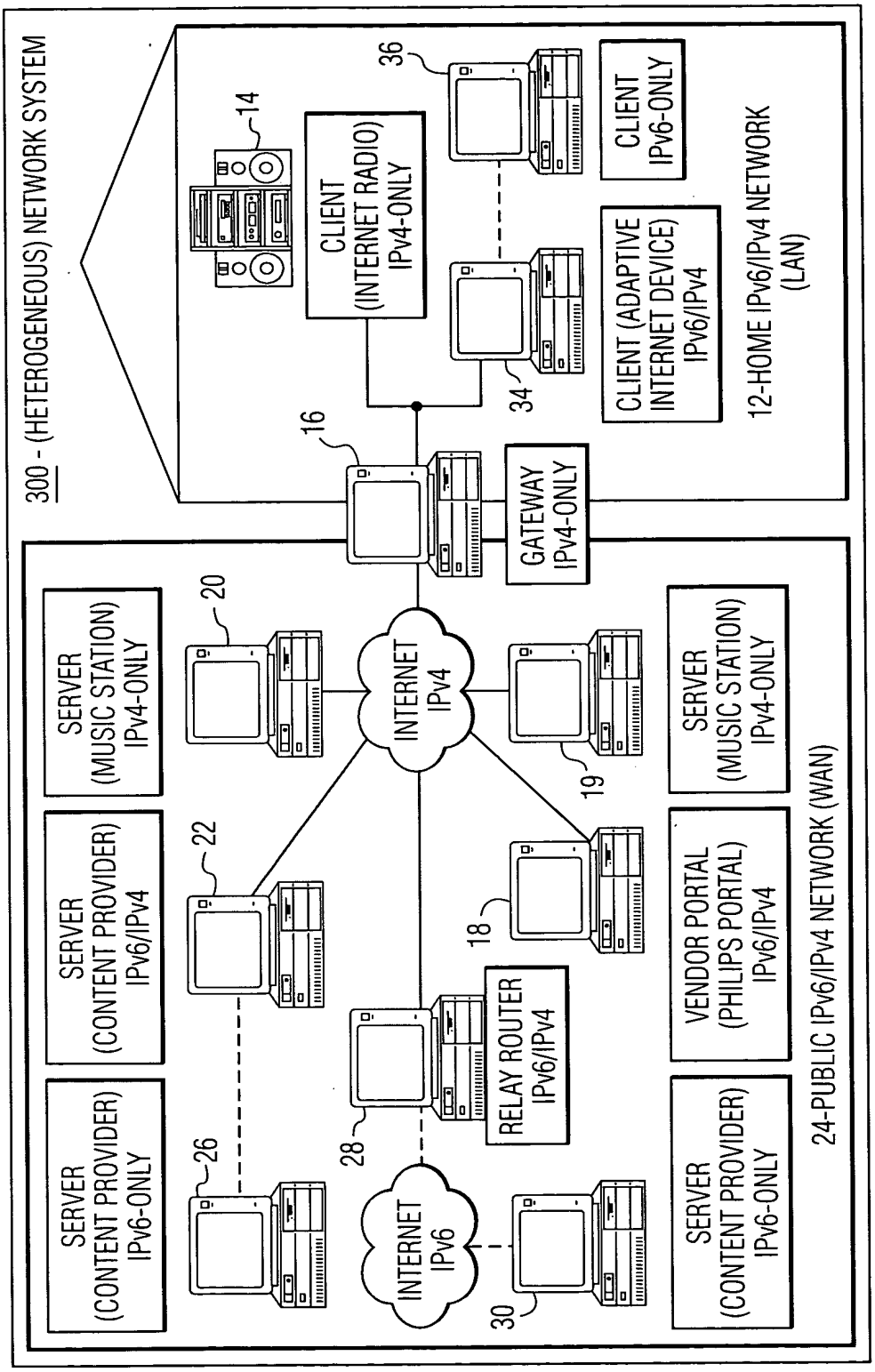
300 - (HETEROGENEOUS) NETWORK SYSTEM
12-HOME IPv6/IPv4 NETWORK (LAN)
CLIENT (INTERNET RADIO) IPv4-ONLY
CLIENT IPv6-ONLY
CLIENT (ADAPTIVE INTERNET DEVICE) IPv6/IPv4
GATEWAY IPv4-ONLY
INTERNET IPv4
INTERNET IPv6
SERVER (MUSIC STATION) IPv4-ONLY
SERVER (CONTENT PROVIDER) IPv6/IPv4
SERVER (CONTENT PROVIDER) IPv6-ONLY
RELAY ROUTER IPv6/IPv4
VENDOR PORTAL (PHILIPS PORTAL) IPv6/IPv4
SERVER (MUSIC STATION) IPv4-ONLY
SERVER (CONTENT PROVIDER) IPv6-ONLY
24-PUBLIC IPv6/IPv4 NETWORK (WAN)
14
16
18
19
20
22
26
28
30
34
36
IPv4
IPv6

FIG. 3

SERVER'S HOSTNAMES TABLE (50)		
HOSTNAMES (51)	IP ADDRESS VERSION (53)	IP ADDRESS OBTAINABLE VIA DNS SERVER (55)
server19.domainA.com	IPv4-ONLY	YES
server20.domainA.com	IPv4-ONLY	YES
server22.domainB.com	IPv6/IPv4	YES
server26.domainB.com	IPv6-ONLY	NO
server30.domainC.com	IPv6-ONLY	YES
serverX.domainD.com	IPv6-ONLY	NO
• • •		

TABLE 1: SERVERS' HOSTNAME TABLE

Hostname2IPaddress TABLE (40)		
HOSTNAMES (41)	IP ADDRESS (43)	RELAY ROUTER (45)
server26.domainB.com	2002:56c2:4512:1:{MAC address}	---
serverX.domainD.com	2345:000D:EB22:0002:1234:5678:9ABC:DEF0	2002:c058:6301::

FIG. 4

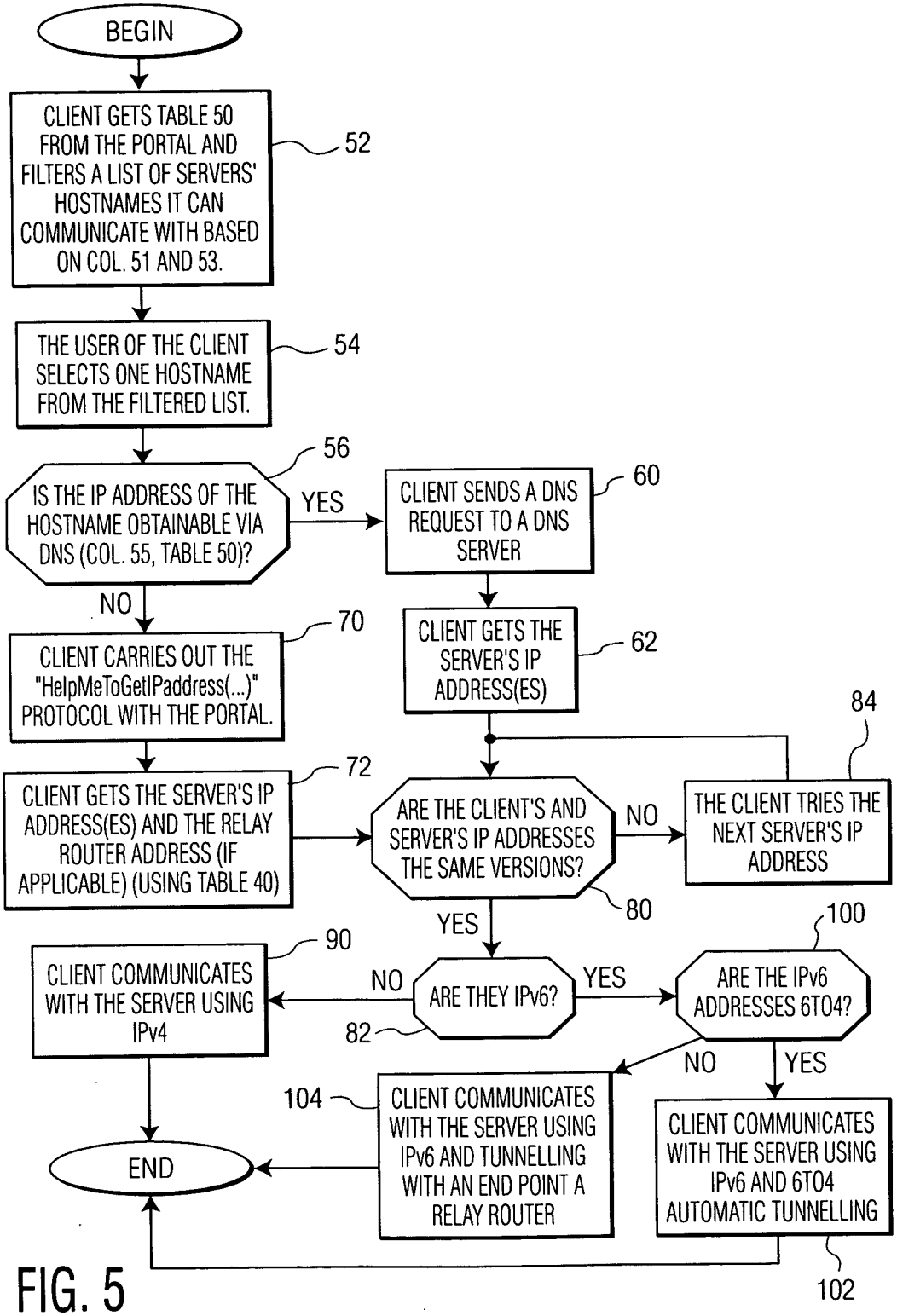
BEGIN
CLIENT GETS TABLE 50 FROM THE PORTAL AND FILTERS A LIST OF SERVERS' HOSTNAMES IT CAN COMMUNICATE WITH BASED ON COL. 51 AND 53.
52
THE USER OF THE CLIENT SELECTS ONE HOSTNAME FROM THE FILTERED LIST.
54
IS THE IP ADDRESS OF THE HOSTNAME OBTAINABLE VIA DNS (COL. 55, TABLE 50)?
56
YES
CLIENT SENDS A DNS REQUEST TO A DNS SERVER
60
NO
CLIENT CARRIES OUT THE "HelpMeToGetIPaddress(...)" PROTOCOL WITH THE PORTAL.
70
CLIENT GETS THE SERVER'S IP ADDRESS(ES)
62
84
CLIENT GETS THE SERVER'S IP ADDRESS(ES) AND THE RELAY ROUTER ADDRESS (IF APPLICABLE) (USING TABLE 40)
72
ARE THE CLIENT'S AND SERVER'S IP ADDRESSES THE SAME VERSIONS?
80
NO
THE CLIENT TRIES THE NEXT SERVER'S IP ADDRESS
YES
100
CLIENT COMMUNICATES WITH THE SERVER USING IPv4
90
NO
ARE THEY IPv6?
82
YES
ARE THE IPv6 ADDRESSES 6TO4?
NO
YES
104
CLIENT COMMUNICATES WITH THE SERVER USING IPv6 AND TUNNELLING WITH AN END POINT A RELAY ROUTER
CLIENT COMMUNICATES WITH THE SERVER USING IPv6 AND 6TO4 AUTOMATIC TUNNELLING
END
102

FIG. 5